

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY PIEDMONT REGIONAL OFFICE 4949A Cox Road, Glen Allen, Virginia 23060 (804) 527-5020 Fax (804) 527-5106

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David K. Paylor Director (804) 698-4000

Matthew J. Stickler Secretary of Natural Resources

James J. Golden Regional Director

December 5, 2018

Mr. Anthony J. Falbo Senior Vice President - Operations FORTISTAR Methane Group, LLC Richmond Energy, LLC Facility 1700 Darbytown Road Henrico, VA 23231

> Location: Henrico County Registration No: 52198

Dear Mr. Falbo:

Attached is your Title V permit to operate your landfill gas to energy plant pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the permit dated November 1, 2017.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on August 20, 2018 and solicited written public comments by placing a newspaper advertisement in the "Richmond Times-Dispatch" on October 19, 2018. The thirty day comment period (provided for in 9 VAC 5-80-270) expired on November 19, 2018 with no public comments and followed no EPA comments at the end of the concurrent 45 day comment period that ended on December 4, 2018.

This approval to operate does not relieve Richmond Energy LLC (Fortistar Methane Group) which operates Old Dominion facility of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The <u>Regulations</u>, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director Department of Environmental Quality P.O. Box 10009 Richmond, Virginia 23240-0009

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please call the regional office at 804-527-5020.

Sincerely,

Deputy Regional Director

KIW/hll/52198_TitleVPermitCoverLetter_ADA_12052018_Final.docx

Attachment: Permit

www.ecfr.gov: 40 CFR 60 NSPS Subpart JJJJ www.ecfr.gov: 40 CFR 63 MACT Subpart ZZZZ

Ec: Manager, Data Analysis (electronic file submission)

Chief, Air Enforcement Branch, U.S. EPA, Region III (electronic file submission



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Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted

Permittee Name:

Richmond Energy LLC Old Dominion Facility

Facility Name: Facility Location:

1700 Darbytown Road,

Henrico, Virginia 23231

Registration Number: 52198 Permit Number:

PRO-52198

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 3 through 21)

December 5, 2018 **Effective Date**

December 4, 2023

Expiration Date

Kyle Ivar Winter, P.E.

Deputy Regional Director

December 5, 2018

Signature Date

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Facility Information

Permittee

Richmond Energy LLC (Fortistar Methane Group) 5087 Junction Road Lockport, NY 14094

Responsible Official

Mr. Anthony J. Falbo Senior Vice President - Operations FORTISTAR Methane Group, LLC

Facility

Richmond Energy LLC Old Dominion Facility 1700 Darbytown Road, Henrico, Virginia 23231

Contact Person

Suparna Chakladar Vice President (951) 833-4153

County-Plant Identification Number: 51-087-00540

Facility Description: NAICS Code: 221119 – A landfill gas and natural gas-fueled electrical power generating facility. The facility is a Title V major source of CO. The facility PTE is limited for HAPs to less than 10/25 tons per year making the facility an area source of for HAPs. This source is located in an attainment area for all pollutants, and is a PSD minor source. The facility is currently permitted under a State Operating Permit, issued on August 24, 2012, amended on August 20, 2014 and November 1, 2017.

Richmond Energy LLC (Fortistar Methane Group) operates Old Dominion facility, a landfill gas and natural gas spark-ignited Caterpillar 3520 electric power generating facility at the Old Dominion Landfill in Henrico County, Virginia. The facility is located on a site that is suitable from an air pollution standpoint. The Richmond Energy LLC process involves taking 100% treated landfill gas from the Old Dominion Landfill site. Natural gas is also available on the site as a backup fuel. Old Dominion Landfill Facility combusts landfill gas in the permitted landfill flares when it is not combusted in the Caterpillar 3520 engines. The Caterpillar 3520 engines can also operate on natural gas, once an engine retrofit is completed.

The landfill gas and natural gas spark-ignited Caterpillar 3520 engines are an affected facility under 40 CFR 60, New Source Performance Standard (NSPS) Subpart JJJJ, therefore subject to owner/operator requirements of the NSPS per MACT Subpart ZZZZ, §63.6590(c). In summary, each unit is required to comply with certain federal emission standards and operating limitations over its useful life.

Emission Units

Fuel Burning Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
		Four Caterpillar		-			·
		3520C spark	19.95 MMBtu/hr				
		ignited gas only	heat input	\$-			
		engines.	each (2,233 Hp),			•	
			each driving a				
CAT - 1	1 .	(Built 09/03/2008)	1,665 kW generator set, total for four	NA	NA .	NMOC, VOC	November1, 2017.
CAT - 2	2	(Built 09/07/2008)	engines, 79.8 MMBtu/hr	NA	NA		
CAT - 3	3	(Built 07/13/2007)	heat input (HHV).	NA .	NA		,
CAT-4	4	(Built 07/17/2007)		NA	NA		

^{*}The Size/Rated capacity [and PCD efficiency] is provided for informational purposes only, and is not an applicable requirement.

Fuel Burning Equipment Requirements - (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4)

Fuel Burning Equipment Requirements - (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) -1. Limitations - Nitrogen oxide (NOX) emissions from the Four Caterpillar 3520 spark ignited gas only engines shall be controlled by the original equipment manufacturer's design and good combustion practices when firing Treated Landfill Gas (LFG) or Natural Gas (NG), whenever any of the engines are operated. The engines shall be provided with adequate access for inspection. The facility shall operate and maintain the engines, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. To ensure that a stable supply of treated landfill gas is being diverted to the facility, the facility shall install and operate a device to monitor and record the process of diverting the collected landfill gas from the landfill ags collection and control system in order to ensure that the process of diverting the landfill ags is operated in accordance with the facilities' standard operating procedures. The facility shall install and operate a device to monitor and record the flow of natural gas to the engines. (9 VAC 5-80-110 and Condition 2 of 11/01/2017 NSR Permit)

- Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations Sulfur dioxide (SOX) emissions from the Four Caterpillar 3520 spark ignited gas only
 engines shall be controlled by the original equipment manufacturer's design and good
 combustion practices when firing Treated Landfill Gas (LFG) or Natural Gas (NG).
 (9 VAC 5-80-110 and Condition 3 of 11/01/2017 NSR Permit)
- 3. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) L'imitations Particulate Matter and Volatile Organic Compounds emissions from the Four Caterpillar 3520 spark ignited gas only engines shall be controlled by the original equipment manufacturer's design and good combustion practices when firing Treated Landfill Gas (LFG) or Natural Gas (NG), whenever any of the engines are operated. Particulate Matter and Volatile Organic Compounds emissions from the Four Caterpillar 3520 spark ignited gas only engines shall be controlled by proper engine maintenance practices as recommended by the manufacturer. The engines shall be repaired and maintained to prevent excess emissions of particulate matter (in the form of PM and PM-10) and Volatile Organic Compounds. (9 VAC 5-80-110 and Condition 4 of 11/01/2017 NSR Permit)
- 4. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations Carbon Monoxide (CO) emissions from the Four Caterpillar 3520 spark ignited gas only engines shall be controlled by the original equipment manufacturer's design and good combustion practices when firing Treated Landfill Gas (LFG) or Natural Gas (NG). (9 VAC 5-80-110 and Condition 5 of 11/01/2017 NSR Permit)
- 5. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations Any uncontrolled venting of landfill gas from the Four Caterpillar 3520 spark ignited gas only engines, the landfill gas treatment system, or the treated landfill gas transport system is prohibited (except safety vents). All treated landfill gas shall be purged from the treated landfill gas transport system or otherwise completely contained within the system prior to shutting down any engine after operating. All atmospheric vents in the treated landfill gas transport system shall be controlled by a lockout-tag-out system or by installing and operating a device to divert the emissions from all vents to an approved landfill gas control system.

 (9 VAC 5-80-110 and Condition 6 of 11/01/2017 NSR Permit)

- 6. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations All components of the treated landfill gas control system, which consists of each one of the Four Caterpillar 3520 spark ignited gas only engines, the treated landfill gas transport system, and the landfill gas treatment system shall be in operation whenever the facility is operating the engines. If any component of the landfill gas treatment system, or treated landfill gas transport system malfunctions, the treated landfill gas transport system shall be shut down and all untreated landfill gas shall be diverted to the remaining engine or to the utility flare(s). If any engine or set of engines malfunctions, that portion of treated landfill gas shall be diverted to the remaining engines, or to the utility flare(s).

 (9 VAC 5-80-110 and Condition 7 of 11/01/2017 NSR Permit)
- 7. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations The facility shall determine the heat value of the Treated LFG on a weekly basis, using the following formula:

Heat Value
$$\left(\frac{BTU}{cf}\right) = \left(\frac{\% \text{ Methane}}{100}\right) \times 1010 \frac{BTU}{cf}$$

A log of the values shall be maintained. The methane-measuring device shall be maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The measuring device shall be provided with adequate access for inspection.

(9 VAC 5-80-110 and Condition 14 of 11/01/2017 NSR Permit)

- 8. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations The facility shall monitor the total sulfur content of the landfill gas or natural gas fuel being fired in the Four Caterpillar 3520 spark ignited gas only engines on an annual basis. (9 VAC 5-80-110 and Condition 15 of 11/01/2017 NSR Permit)
- 9. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations The entire landfill gas treatment system as specified in Condition 20 is required to comply with 40 CFR 60.752 (b) (2) (iii) and shall be installed and operational whenever landfill gas is being transferred to any the Four Caterpillar 3520 spark ignited gas only engines. Verification of satisfactory operation of treatment equipment shall, at a minimum, include certification that manufacturer's written requirements or recommendations for installation, operation, and maintenance of the devices shall be followed.
 (9 VAC 5-80-110 and Condition 16 of 11/01/2017 NSR Permit)
- 10. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations The approved fuels for the Four Caterpillar 3520 spark ignited gas only engines are treated landfill gas and natural gas. Only one type of fuel may be combusted at one time. A change in the fuels may require a permit to modify and operate.
 (9 VAC 5-80-110 and Condition 17 of 11/01/2017 NSR Permit)
- 11. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations The facility shall limit mega-watt hours to 55,425.52 on treated LFG for all engines and shall limit mega-watt hours to 27,362.21 on Natural Gas (NG) for all engines such that total Carbon Monoxide emissions do not exceed 248.3 tons, for any consecutive 12-month period. Each engine is limited to producing no more than 1,665 kW per hour and/or 2,233 Brake Horsepower (BHP).

(9 VAC 5-80-110 and Condition 18 of 11/01/2017 NSR Permit)

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12. Fuel Burning Equipment Requirements - (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) - Limitations - The fuels shall meet the specifications below:

Treated Landfill Gas:

Minimum heat content:

200 BTU/scf*

Maximum sulfur content:

317 ppm (TRS LFG concentration)

Natural Gas:

Nominal heat content:

1010 BTU/scf

*The heat content of the treated landfill gas shall be analyzed for Gross Calorific Value using methods outline in Permit Condition 7.

(9 VAC 5-80-110 and Condition 19 of 11/01/2017 NSR Permit)

13. Fuel Burning Equipment Requirements - (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) - Limitations - Treated landfill gas shall be that which is produced by the BFI Waste Systems of Virginia, LLC" - Old Dominion Landfill (Registration Number 51227) as that facility is permitted by the Virginia Department of Environmental Quality and has been processed in accordance with 40 CFR 60.752 (b) (2) (iii) (C). The landfill gas treatment system shall be owned and operated by Richmond Energy LLC and at a minimum, shall be composed of a de-watering process, filtration through a 10-micron filter, and compression. The facility's de-watering process shall consist of a tertiary or polishing tank with a total capacity of not less than 50 gallons. The primary and secondary knockout tanks are located at the BFI Charles City Road Landfill (Registration Number 51227). All landfill gas consumed at the permitted facility shall pass through each component of the landfill gas treatment process prior to use in the Richmond Energy LLC combustion process.

(9 VAC 5-80-110 and Condition 20 of 11/01/2017 NSR Permit)

14. Fuel Burning Equipment Requirements - (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) - Limitations - Emissions from the operation of the Four Caterpillar 3520 spark ignited gas only engines when the facility is operated on treated landfill gas shall not exceed the limits specified below:

	Each g/BHP-hr	Each Ib/hour	Combin Total-Tor	ed ns Per Year
Particulate Matter	0.376	1.9	30.8	(9 VAC 5-50-260)
PM-10	0.376	1.9	30.8	(9 VAC 5-50-260)
PM-2.5	0.376	1.9	30.8	(9 VAC 5-50-260)
Sulfur Dioxide	0.342	1.7	28.0	(9 VAC 5-50-260)
Nitrogen Oxides (as NO:	2) 0.804	4.0	65.9	(9 VAC 5-50-260)
Carbon Monoxide	3.030	14.9	248.3	(9 VAC 5-50-260)
Volatile Organic Compounds	0.148	0.7	12.1	(9 VAC 5-50-260)

Compliance with lb/MMBtu limits for PM, PM-10, PM-2.5, NOx, CO and VOC shall be determined by stack testing. All other emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in condition numbers 1 through 6, 10, 11, 12 and 13. (9 VAC 5-80-110 and Condition 21 of 11/01/2017 NSR Permit)

15. Fuel Burning Equipment Requirements - (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) - Limitations - Emissions from the operation of the Four Caterpillar 3520 spark ignited gas only engines when the facility is operated on natural gas shall not exceed the limits specified below:

	Each g/BHP-hr	Each Ib/hour	Combined Total Tons Per Year
Particulate Matter	0.0450	0.222	1.8 (9 VAC 5-50-260)
PM-10	0.0004	0.002	0.1 (9 VAC 5-50-260)
PM-2.5	0.0004	0.002	0.1 (9 VAC 5-50-260)
Sulfur Dioxide	0.0027	0.013	0.1 (9 VAC 5-50-260)
Nitrogen Öxides (as NO	2) 0.6450	3.2	. 26.1 (9 VAC 5-50-260)
Carbon Monoxide	2.7610	13.6	111.7 (9 VAC 5-50-260)
Volatile Organic Compounds	0.9420	4.6	38. 1 (9 VAC 5-50-260)

Compliance with Ib/MMBtu limits for PM, PM-10, PM-2.5, NOx, CO and VOC shall be determined by stack testing. All other emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1 through 6, 10, 11, 12 and 13. (9 VAC 5-80-110 and Condition 22 of 11/01/2017 NSR Permit)

16. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) - Limitations - Total emissions from the facility shall not exceed the limits specified below, calculated monthly as the sum of each consecutive 12-month period:

·		Tons Per	Year Year
Particulate Matter		30.8	(9 VAC 5-50-260)
PM-10		30.8	(9 VAC 5-50-260)
PM-2.5	`	30.8	(9 VAC 5-50-260)
Sulfur Dioxide		28.0	(9 VÁC 5-50-260)
Nitrogen Oxides (as NO ₂)		65.9	(9 VAC 5-50-260)

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Carbon Monoxide	248.3	(9 VAC 5-50-260)
Volatile Organic Compounds Single HAP		(9 VAC 5-50-260) (9 VAC 5-50-260)
Total HAPs	, 24.5	(9 VAC 5-50-260)

Emissions limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1 through 6, 10, 11, 12 and 13.

(9 VAC 5-80-110 and Condition 23 of 11/01/2017 NSR Permit)

17. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) - Limitations - Visible emissions from the Four Caterpillar 3520 spark ignited gas only engines stacks shall not exceed 10% opacity whenever the engines are operated except during one six-minute period in any one hour in which visible emissions shall not exceed 20% opacity. All visible emissions rates shall be determined by EPA Method 9 (reference 40 CFR 60, Appendix A). At all times, including periods of startup, shutdown and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions.

(9 VAC 5-80-110 and Condition 24 of 11/01/2017 NSR Permit)

- 18. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations The RICE MACT, 40 CFR 63 Subpart ZZZZ §63.6590(a)(2)(iii), for which construction commenced after June 12, 2006, identifies the four Caterpillar engines (CAT-1, CAT-2, CAT-3 and CAT-4) is new diesel engines. The facility shall notify the Administrator of the installation or replacement or modification of any engine on site and each engine (CAT-1, CAT-2, CAT-3 and CAT-4), by complying with NSPS Subpart JJJJ, §60.4236 requirements. This may result in the applicability of additional requirements under 40 CFR 60 NSPS Subpart IIII or NSPS Subpart JJJJ and/or 40 CFR 63 MACT Subpart ZZZZ.

 (9 VAC 5-80-110 and 40 CFR 63.6590(a)(2)(iii) of 40 CFR 63 Subpart ZZZZ)
- 19. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations Except where this permit is more restrictive than the applicable requirement, the permittee shall operate the four Caterpillar 3520 spark ignited gas only engines in compliance with all applicable requirements of 40 CFR 63 Subpart ZZZZ as required by §§63.6590(c) requiring the permittee to comply with all procedure in 40 CFR 60, Subpart JJJJ. (9 VAC 5-80-110, 40 CFR 63.6590(c) of 40 CFR 63 Subpart ZZZZ and 40 CFR Part 60, Subparts JJJJ)
- 20. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Limitations Except where this permit is more restrictive than the applicable requirement, the permittee shall operate the four Caterpillar 3520 spark ignited gas only engines in compliance with all applicable requirements of 40 CFR 60, Subpart JJJJ ((§60.4230, §60.4233 Table 1, §60.4233(e), §60.4234, §60.4236, §60.4243, §60.4244, §60.4245 Table 2 and §60.4246 Table 3). As per the requirements of 40 CFR §60.4233 (Table 1) the permittee shall comply with the Federal Standard (either g/hp-hr/ppmvd at 15% O2 for NOx = 3.0/220, CO=5.0/610, VOC=1.0/80 respectively) for Landfill/Digester Gas engines manufactured after 7/1/2007. The Caterpillar stationary engines shall meet the emission standards over the life of the engine per 40 CFR

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§60.4234. The permittee shall comply with the requirements found in §60.4243(b)(2)(ii) to keep a maintenance plan and keep records of maintenance on each engine for a period of five years per §60.4245(a). This includes all notifications submitted, maintenance conducted on each engine and supporting documentation that each engine meets the emission standard. Emissions shall be controlled by the use of good operating practices and performing appropriate maintenance in accordance with the manufacturer recommendations. The permittee shall keep records supporting the requirements of 40 CFR 60, NSPS Subpart JJJJ (40 CFR §60.4230 through §60.4246). The stationary engines require continuing performance testing every 8,760 hours or three years, whichever comes first, per the requirements in 40 CFR §60.4243(b)(2)(ii) and §60.4244 with specific requirement in Table 2, which shall apply. The performance test shall be conducted per §60.4244(a-g) and one copy of the final test report shall be submitted within 60 days after the test is completed per §60.4245(d). The general provisions found in Table 3 to Subpart JJJJ of Part 60 shall apply as noted (§60.4246). (9 VAC 5-80-110, 40 CFR 63.6590 (c) of 40 CFR 63 Subpart ZZZZ and 40 CFR Part 60, Subparts JJJJ)

- 21. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Monitoring The facility shall be equipped with devices to continuously measure and record the flow of treated landfill gas and Natural Gas by the Four Caterpillar 3520 spark ignited gas only engines. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the facility is operating. (9 VAC 5-80-110 and Condition 8 of 11/01/2017 NSR Permit)
- 22. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Monitoring Each of the Four Caterpillar 3520 spark ignited gas only engines shall be equipped with a device to continuously measure megawatt-hour output. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the engines are operating. (9 VAC 5-80-110 and Condition 9 of 11/01/2017 NSR Permit)
- 23. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Monitoring The facility shall be equipped with devices to continuously measure the pressure within the treated landfill gas transport system. At a minimum, devices shall be located just before and just after the 10-micron filter and after the completed treatment process. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the facility is operating. (9 VAC 5-80-110 and Condition 10 of 11/01/2017 NSR Permit)
- 24. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Monitoring The facility shall log observations of megawatt hours and landfill gas or Natural Gas flow to the Four Caterpillar 3520 spark ignited gas only engines, when operating (engines noted as "OFF" when not running). The log, either electronically or in writing, shall contain a minimum of hourly observations processed monthly and stored onsite. The facility will maintain a written log, stored onsite, containing hourly observations for the periods of electronic/computer problems/failure to commence within one hour of an electronic records problem/computer failure. The log shall be used for emissions calculations during periods where some or all

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electronic data are not available. In the case where no electronic information or manual records are available, the facility will calculate emissions using worst-case scenario. (9 VAC 5-80-110 and Condition 11 of 11/01/2017 NSR Permit)

- 25. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Monitoring The monitoring devices used to measure engine megawatt hour output shall be observed by the facility with a frequency of not less than hourly whenever the engines are operating. The facility shall keep a daily log of the engine megawatt hour output observations from the monitoring devices including the time the observation was recorded. (9 VAC 5-80-110 and Condition 12 of 11/01/2017 NSR Permit)
- 26. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Monitoring The monitoring device used to measure the pressure in the treated landfill gas system or natural gas shall be observed by the facility whenever treated landfill gas or natural gas is combusted in the engines with a frequency of not less than Monday through Friday (except Holidays) to ensure good performance of the treatment system or natural gas delivery system. The facility shall keep a daily log of the observations from the monitoring device, including the change in pressure across the 10-micron filter for treated landfill gas. (9 VAC 5-80-110 and Condition 13 of 11/01/2017 NSR Permit)
- 27. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Recordkeeping The facility shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:
 - Annual mega-watt hours on treated landfill gas, mega-watt hours on natural gas, annual throughput of treated landfill gas and natural gas calculated monthly as the sum of each consecutive 12-month period;
 - b. Daily records of mega-watt hours on treated landfill gas and mega-watt hours on natural gas for every period of operation to verify compliance with Condition numbers 10, 11, and
 - c. Daily log of the polishing tank observation results as described in Condition 32.
 - d. Hourly records of engine megawatt-hour readings to verify compliance with Condition 24;
 - Monthly and annual emission (in tons) using calculation methods approved by the Piedmont Regional Office to verify compliance with emission limitations in Conditions 14, 15 and 16. Annual emissions shall be calculated monthly as the sum of each consecutive 12month period;
 - f. Treated landfill gas transport system pressure readings to verify compliance with Condition 26:
 - g. Weekly landfill gas gross calorific value determination results, including % methane readings as described in Condition 7;
 - h. Results of all stack tests, visible emission evaluations, monthly visible emission evaluations log and performance evaluations;
 - i. All fuel supplier certifications, treated landfill gas and natural gas sulfur content results;
 - j. Scheduled and unscheduled maintenance on the engines;
 - k. Operating procedures and operator training records for the engines;
 - I. All records generated by the device installed for the purpose of continuously monitoring and recording the status of the device used to divert the collected landfill gas from a utility flare to the landfill gas treatment system and then to any of the engines as required by Condition 1.

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These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 25 of 11/01/2017 NSR Permit)

- Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) -Testing - Initial performance tests shall be conducted for PM, PM-10, NOx, CO, VOC and SO2 from the Four Caterpillar 3520 spark ignited gas only engines to determine compliance with the emission limits contained in Condition 14. The tests shall be performed while operating using 100% treated landfill gas. The treated landfill gas fuel tests shall be performed at no less than 90% of the rated capacity for the upper point of the electrical output on a minimum of one of the Four Caterpillar 3520 spark ignited gas only engines at two points. The lower of the two points shall define the range in meaawatts that the engines meets the emissions limits for CO. SO2 results are not required for the lower point test. All Four Caterpillar 3520 spark ignited gas only engines shall be tested. The tests shall be performed, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Piedmont Region. The facility shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-110 and Condition 26 of 11/01/2017 NSR Permit)
- Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) -Testing - Initial performance tests shall be conducted for PM, PM-10, NOx, CO, VOC (with speciation testing for HAPs) and SO2 pollutant emissions from the Four Caterpillar 3520 spark ignited gas only engines to determine compliance with the emission limits contained in Condition 15. The tests shall be performed while operating on Natural Gas fuel using the maximum gas rate achieved during testing. The natural gas fuel tests shall be performed at no less than 90% of the rated capacity for the upper point of the electrical output on a minimum of one the Four Caterpillar 3520 spark ignited gas only engines at two points. The lower of the two points shall define the range in megawatts that the engines meets the emissions limits for CO. All Four Caterpillar 3520 spark ignited gas only engines shall be tested and the low operating range in megawatts defined that the engine meets the emissions limits for CO. SO2 results are not required for the lower point test. The tests shall be performed, and demonstrate compliance within 60 days after first firing natural gas at the facility. Natural Gas testing is not required until the engines are physically converted from LFG only to Natural Gas only. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Piedmont Region. The facility shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-110 and Condition 27 of 11/01/2017 NSR Permit)
- 30. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Testing Concurrently with the initial and subsequent performance test as required in Condition 28, the facility shall determine the moisture content and gross caloric value of the treated landfill gas, as sampled, prior to combustion in the Four Caterpillar 3520 spark ignited gas only engines. The moisture content testing shall be conducted in accordance with 40 CFR Part 60,

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Appendix A, Method 4. Each test shall be reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the test are to be arranged with the Piedmont Regional Office. The facility shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-110 and Condition 28 of 11/01/2017 NSR Permit)

- Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) -Testing - Concurrently with the initial performance tests required in Conditions 28 and 29, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the facility on those engines tested. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Director, Piedmont Region. The facility shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed, and reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Director, Piedmont Region shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. Two copies of the test result shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-110 and Condition 29 of 11/01/2017 NSR Permit)
- 32. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Testing The facility shall drain the polishing tank referenced in Condition 13 at least once each day (into the holding tank) that landfill gas is consumed by the facility, and observe the presence or absence of any water collected in the tank, Monday through Friday (except Holidays). The facility shall maintain a daily log of these observations, which shall include the date and time of each observation.

 (9 VAC 5-80-110 and Condition 30 of 11/01/2017 NSR Permit)
- Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) -Testing - The facility shall perform a PM-2.5 (one time only), CO, NOx and VOC performance validation test. The CO, NOx and VOC performance tests required in either conditions 28 and 29 shall at a minimum be conducted once every 3 years or 8,760 hours of operation (Each engine) on all stacks and before the operating permit renewal application, starting from the completion date of the testing as required in Condition 28 and 29. One test shall be performed while either combusting 100% landfill gas or combusting 100% natural gas. The landfill gas test shall be performed at no less than 90% of the rated capacity of the electrical output. The natural gas tests shall be performed at no less than 90% of the rated capacity of the electrical output. The selected test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Piedmont Region. The facility shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-110 and Condition 31 of 11/01/2017 NSR Permit)

- 34. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) Testing The permitted facility shall be constructed so as to allow for emissions testing and
 monitoring upon reasonable notice at any time, using appropriate methods. This includes
 constructing the facility such that volumetric flow rates and pollutant emission rates can be
 accurately determined by applicable test methods and providing stack or duct that is free from
 cyclonic flow. Test ports shall be provided when requested at the appropriate locations.

 [9 VAC 5-80-110 and Condition 32 of 11/01/2017 NSR Permit]
- Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) -Testing - Once per month, the facility shall conduct an observation of the presence of visible emissions from the operating Caterpillar 3520 spark ignited gas only engines. If visible emissions are observed, the facility shall take timely corrective action such that the units resume operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from any of engines does not exceed 10% opacity whenever the engines are operated, except during one six-minute period in any one hour in which visible emissions shall not exceed 20%. The VEE shall be conducted for a minimum of six minutes. If any of the observation exceeds 10% opacity, the VEE shall be conducted for sixty minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the operating engines resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, landfill gas or natural gas fuel operations, whether or not there were visible emissions, any VEE recordings and necessary corrective actions. Upon request by the DEQ, the facility shall conduct additional visible emission evaluations from the Four Caterpillar 3520 spark ignited gas only engines to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Region. (9 VAC 5-80-110 and Condition 33 of 11/01/2017 NSR Permit)
- 36. Fuel Burning Equipment Requirements (emission unit ID# CAT-1, CAT-2, CAT-3 and CAT-4) -Reporting - The facility shall furnish written notification to the Director, Piedmont Region and US EPA at the address below:
 - The actual date on which the installation of the Four Caterpillar 3520 spark ignited gas only engines are installed within 30 days after such date.
 - b. The anticipated start-up date the Four Caterpillar 3520 spark ignited gas only engines postmarked not more than 60 days nor less than 30 days prior to such date.
 - c. The actual start-up date the Four Caterpillar 3520 spark ignited gas only engines within 15 days after such date.
 - d. The anticipated date of performance tests of the Four Caterpillar 3520 spark ignited gas only engines plant postmarked at least 30 days prior to such date.

Copies of the written or electronic notification referenced in terms a, through d, are to be sent to:

Associate Director, Office of Air Enforcement (3AP00)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

R3_APD_Permits@epa.gov (9 VAC 5-80-110 and Condition 34 of 11/01/2017 NSR Permit)

Insignificant Emission Units

37. Insignificant Emission Units - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80-720C)
T-1	Lube Oil Storage Tank.	9 VAC 5-80-720C	voc	3500 gallons
T-2	Lube Oil Storage Tank.	9 VAC 5-80-720C	voc	3500 gallons
T-3	Coolant Storage Tank.	9 VAC 5-80-720C	voc	1,000 gallons
T-4	Coolant Storage Tank.	9 VAC 5-80-720C	voc	1,000 gallons
T-5	Water Storage Tank.	9 VAC 5-80-720C	-	1,000 gallons
T-6	Water Storage Tank.	9 VAC 5-80-720C	<u>.</u>	1,000 gallons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Compliance Certification and Schedule

38. Compliance Plan - Description of Compliance Requirements - The permittee has certified that this facility is in compliance with all state and federal regulations. No compliance schedule has been included with this permit.

(9 VAC 5-80-110)

Permit Shield and Inapplicable Requirements

39. Permit Shield and Inapplicable Requirements - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of applicability
None.		
		.,

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

General Conditions

- 40. General Conditions Federal Enforceability All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

 (9VAC5-80-110)
- 41. General Conditions Permit Expiration This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration. (9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
- 42. General Conditions Permit Expiration The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration. (9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
- 43. General Conditions Permit Expiration If an applicant submits a timely and complete application for an initial permit or renewal under 9VAC5-80-80 F, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.

 (9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
- 44. General Conditions Permit Expiration No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.

 (9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
- 45. General Conditions Permit Expiration If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

 (9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
- 46. General Conditions Permit Expiration The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application. (9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
- 47. General Conditions -Recordkeeping and Reporting All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements;

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- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

- 48. General Conditions -Recordkeeping and Reporting Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

 (9VAC5-80-110)
- 49. General Conditions -Recordkeeping and Reporting The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
 - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedances of emissions limitations or operational restrictions;
 - Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9VAC5-80-110)

50. General Conditions - Annual Compliance Certification - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

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- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9VAC5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address: R3_APD_Permits@epa.gov

(9VAC5-80-110)

- 51. General Conditions Failure/Malfunction Reporting In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Piedmont Regional Office of such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Piedmont Regional Office. (9VAC5-80-110 and 9VAC5-20-180)
- 52. General Conditions Failure/Malfunction Reporting The emission units that have continuous monitors subject to 9VAC5-50-50 C are not subject to the 14 day written notification. (9VAC5-20-180 and 9VAC5-50-50)
- 53. General Conditions Failure/Malfunction Reporting The emission units subject to the reporting and the procedure requirements of 9VAC5-50-50 C are the engines (CAT-1, CAT-2, CAT-3 and CAT-4).

(9VAC5-80-110, 9VAC5-20-180 C and 9VAC5-50-50)

- 54. General Conditions Failure/Malfunction Reporting Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9VAC5-40-41 or 9VAC5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9VAC5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board quarterly. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. All reports shall include the following information:
 - The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9VAC5-40-41 B.6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;

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- Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
- The date and time identifying each period during which the continuous monitoring system
 was inoperative except for zero and span checks and the nature of the system repairs or
 adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9VAC5-50-50 C require written reports within 14 days of the discovery of the malfunction.

(9VAC5-80-110, 9VAC5-20-180 C and 9VAC5-50-50)

- 55. General Conditions Severability The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

 (9VAC5-80-110)
- 56. General Conditions Duty to Comply The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application. (9VAC5-80-110)
- 57. General Conditions Need to Halt or Reduce Activity not a Defense It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (9VAC5-80-110)
- 58. General Conditions Permit Modification A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
 - (9VAC80-110, 9VAC5-80-190 and 9VAC5-80-260)
- 59. General Conditions Property Rights The permit does not convey any property rights of any sort, or any exclusive privilege. (9VAC5-80-110)
- 60. General Conditions Duty to Submit Information The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9VAC5-80-110)

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61. General Conditions - Duty to Submit Information - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G. (9VAC5-80-110)

- 62. General Conditions Duty to Pay Permit Fees The owner of any source for which a permit under 9VAC5-80-50 through 9VAC5-80-300 was issued shall pay permit fees consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9VAC5-80-2340, adjusted annually by the change in the Consumer Price Index. (9VAC5-80-110, 9VAC5-80-340 and 9VAC5-80-2340)
- 63. General Conditions Fugitive Dust Emission Standards During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
 - Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
 - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
 - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-50-90 and 9VAC5-80-110)

64. General Conditions - Startup, Shutdown, and Malfunction - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9VAC5-50-20 E and 9VAC5-80-110)

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65. General Conditions - Alternative Operating Scenarios - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1. (9VAC5-80-110)

- 66. General Conditions Inspection and Entry Requirements The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
 - a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
 (9VAC5-80-110)
- 67. General Conditions Reopening for Cause The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:
 - a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110)

- 68. General Conditions Permit Availability Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9VAC5-80-110 and 9VAC5-80-150)
- 69. General Conditions Transfer of Permits No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another. (9VAC5-80-110 and 9VAC5-80-160)

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70. General Conditions - Transfer of Permits - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200. (9VAC5-80-110 and 9VAC5-80-160)

- 71. General Conditions Transfer of Permits In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200. (9VAC5-80-110 and 9VAC5-80-160)
- 72. General Conditions Permit Revocation or Termination for Cause A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations. (9VAC5-80-110, 9VAC5-80-190 C and 9VAC5-80-260)
- 73. General Conditions Duty to Supplement or Correct Application Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

 (9VAC5-80-110 and 9VAC5-80-80 E)
- 74. General Conditions Stratospheric Ozone Protection If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (9VAC5-80-110 and 40 CFR Part 82)
- 75. General Conditions Asbestos Requirements The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

 (9VAC5-60-70 and 9VAC5-80-110)
- 76. General Conditions Accidental Release Prevention If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (9VAC5-80-110 and 40 CFR Part 68)

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77. General Conditions - Changes to Permits for Emissions Trading - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9VAC5-80-110)

- 78. General Conditions Emissions Trading Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
 - a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110)